Supply Chain Value –
Three principles to obtain more from your supply chain initiatives

UPS Supply Chain Solutions℠

Our Insight.
A UPS Supply Chain Solutions White Paper

It's no secret that the supply chain of most companies remains an area of untapped value. Executives are broadly aware of opportunities to reduce supply chain costs/assets and improve processes, but they need to put a few basic principles to work to capture more value from the improvement initiatives.

These days, an executive doesn't make it to the top without being aware of some fundamental supply chain issues.

- Under-utilized distribution centers are expensive
- Excess inventory is a waste
- Transportation modes should satisfy customers at the best possible cost.

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Armed with this basic knowledge, each year's list of supply chain initiatives is typically designed to keep supply chain cost and service within an "acceptable" range. These kinds of initiatives make sense at a managerial level and satisfy the need for purposeful direction, but most companies, if they follow a few basic principles, can obtain greater value from supply chain initiatives. (See Figure 1)

Capturing more supply chain value

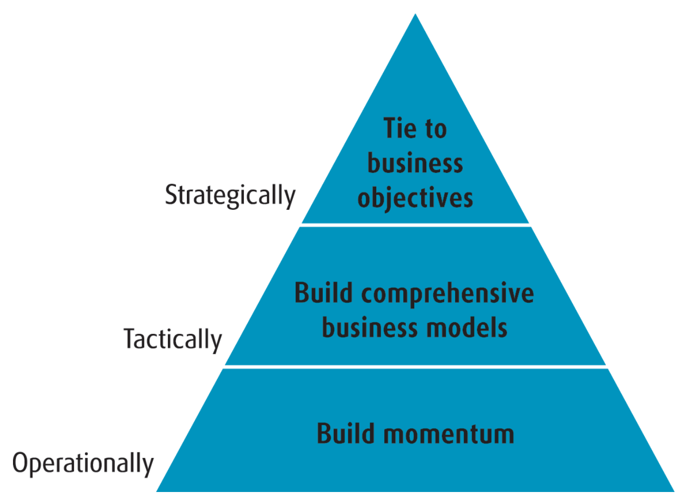

Figure 1: Companies can derive greater value from their supply chains by ensuring their businesses' strategies are aligned with tactics and operations.

Principle one: Any improvement initiative must be tied to an appropriate business objective.

For example, reducing transportation costs is easy if a company can also afford to reduce on-time reliability. Being able to reduce transportation costs while improving service levels, or profit per customer, is much harder, unless market conditions are favorable. Yet, even in difficult market situations, it is still a highly achievable goal, if there is clear understanding of the link between a stated business initiative, such as reducing transportation costs, and the best supply chain lever to use. This is not easy and it requires detailed knowledge of the dynamics inherent in a company's supply chain.

All too frequently, what appears to be a straightforward initiative, like reducing transportation costs, so adversely affects other parts of the supply chain that the savings are never realized. Time after time, experience with numerous companies across many industries continues to prove that the pursuit of narrowly defined improvements, like reducing costs in one area, typically results in only temporary benefits.

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Why? Because a supply chain that links suppliers, production and distribution together under a common demand forecast is inherently interdependent. It's hard for most companies to discern the value available because they lack the basic measurement and control mechanisms necessary to achieve focused improvement in one area while misunderstanding what it will do to another. This leads to the next and more difficult, principle.

Principle two: Develop robust business models which include the core assumptions, processes and constraints that exist within the supply chain.

Models are used to mimic or simulate experience without the business risk of deploying assets. For a given starting state, a model can produce one possible scenario or generate all possible scenarios weighted by their probabilities of occurrence. In either case, the model is used to simulate the environment and produce simulated experience. The bottom line is that instead of deploying assets to a major initiative and hoping for results, fact-based business modeling is a faster, less expensive, and more dynamic way to find value targets.

Take for example a recently completed resource optimization project for a delivery business. The client engaged UPS Supply Chain Solutions to evaluate a variety of ideas about improving its return on assets (ROA). In order to understand what drives value from operating assets through double shifts, weekends, etc., a delivery operations business model needed to be developed and deployed. Once the model was completed, UPS Supply Chain Solutions could manipulate the assets deployed across various time horizons to understand which ones offered the most value. This type of modeling also provided the opportunity to manipulate other variables and demonstrate how even greater value opportunities could be obtained. The model showed how time-dependent this particular operation was and recommended specific strategies to address the management of time, a variable the company was not previously measuring.

Business modeling has historically been the domain of investment bankers and consultants. And although many firms have experienced MBAs who have done various types of business modeling, it is important to realize a supply chain business model is very different:

1. Supply chain modeling must be fact-based. Independent participants can assert facts and avoid "taking sides" that may be risky for employees.
2. The objective is not to build a model. The objective is to model the *sensitivity* of one variable against others. A simple model can work just fine in certain circumstances. However, research teams should be involved immediately when doing multi-echelon inventory strategies, industrial engineers and operations.
3. The fundamental building blocks of work are the *methods and standards* for the tasks. The delivery operations of UPS define the methods and associated work standards for each task down to the fourth decimal point. This is valuable for UPS, which has the tools and experience to dynamically shift resources each day, but may be far too finite for most companies.

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Some models of how much time discrete tasks require, if done in the proscribed method, are inherent in any business plan. For too many supply chain operations, the model is full of broad assumptions based on yesterday's volume and product mix. Modeling supply chain operations with alternative work methods and standards can help limit the impact of variables and improve control. With better control comes the ability to realistically deliver supply chain costs and service levels enabling the broader business objectives to be met. However, once the supply chain initiatives start to affect employees at the level of job tasking, then a new principle comes into play.

Principle three: Build momentum.

Creating change requires management to address two key components of momentum—rational behavior and friction. For example, if a commodity procurement specialist is penalized for being out of stock keeping units (SKUs), but is not responsible for inventory carrying costs, as is often the case, there's a high likelihood of too many "days on hand" for that inventory. Keeping excess inventory is rational behavior for that worker. Creating job definitions for which rational behavior is aligned with business objectives creates a vital "cycle" of continuous improvement.

For supply chain initiatives to build sustained results, management must also aggressively seek out and remove the kind of "friction" that kills change. Experience has demonstrated that friction within supply chain operations can come in many forms. Front line workers and managers are most fearful, uncertain and doubtful about changes, so trust and learning must precede changes in behavior. Executive leadership, advocacy and active feedback are essential elements in creating the right environment for change once a company really understands the drives of value in its supply chain operation. Making effective changes involves proper measurement of value drivers and active support from front line management when there is a variance from behaviors and results that contribute most to business success. Proper measurement and incentives aligned with business objectives give individuals the reasons to do the right thing each time they perform their tasks — and that is the right goal.

In Summary

Supply chains are filled with complex tradeoffs — inventory stocking location vs. delivery intensity; customer service vs. cost to serve; volume vs. velocity — to name but a few. Putting the three principles explained in this piece to work on supply chain initiatives can help a company affect the right tradeoffs to produce sustained value. Decide on the business benefit or strategy, and take the time to understand its affect on the supply chain. The incentive will be longer-term sustained value for shareholders.

About the Authors

Rodney Moore is a principal at UPS Supply Chain Solutions and is based in California. He can be reached at rmoore@ups-scs.com; Larry Van Pelt, principal, is based in California and can be reached at lvanpelt@ups-scs.com.

To learn more about how our experience in supply chains and consulting can help your business, please contact us:

1.800.742.5727 U.S.
1.678.746.4365 International
Visit us at ups-scs.com

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By aligning a client's business strategies with its operating processes, UPS Supply Chain Solutions can create high-performance supply chains that from inception to implementation generate real, hard-number values and quick benefit realization. This distinguishing capability, our experience in solving real-world challenges, and the resources of UPS enable us to set strategies, design and build solutions as well as implement, operate, manage and synchronize your world of commerce.